on and confirmatory of geological changes. For these reasons and those noted at the beginning, viz. — wide distribution, terrestrial and conspicuous habits, numerical abundance, size, etc. — the family and its distribution is of high importance in a study of life zones in their relation to agriculture and of faunal regions in their relation to general science.

In conclusion, while the evidence here presented is drawn largely from personal experience, I wish to acknowledge my indebtedness also to Messrs. Scudder, Henshaw, Beutenmüller, McNeill, Harvey, and others through data furnished by their publications, collections, or notes of various kinds. Owing to the total lack of data from broad portions of the district it is manifestly impossible to draw definite boundaries at present for the faunal areas of locust-distribution, and I am under great obligations to Mr. Scudder for permission to reproduce from his faunal and climatal map those portions and features most desirable for examination in this connection. The terminology used, in a few cases now needing revision, is, for convenience, the same as that in my "Notes on New England Acridiidae" (Psyche, Oct. 1894 to Dec. 1898), which contain fuller details — seasonal, physiographical, and geographical — of the distribution of each species in New England than can be given in the limits of this sketch.

POSTSCRIPT ON PERDITA.

I have now before me mounted heads of *P. semicrocea*, which is the nearest to Smith's typical species I have seen, and of *P. verbesinae* which is a typical *Cockerellia*. The actual palpal differences are as follows:—

P. semicrocea. Labial palpi with the first joint about or hardly as long as the other three together; second longer than third or fourth, which are about equal to one another. Maxillary palpi with the last three joints about equal to one another, and longer than first three.

P. verbesinae. Labial palpi with the first joint about or over twice as long as the other three together; the other three subequal, but the third the shortest. Maxillary palpi with the first joint longest, the others about equal to one another, except that the second is shortest.

I must admit that there is more difference than I had supposed.

T. D. A. Cockerell.

Mesilla Park, Nov. 7.

RECENT LITERATURE.

THREE entomological works of a more or less popular character have been issued recently and demand brief notice.

The readers of PSYCHE are well acquainted with the careful observations of the habits of insects made by Mr. and Mrs. Peckham of Milwaukee. The State of Wisconsin has now published a volume by them on the instincts and habits of the solitary wasps. It is replete with interest and merits unqualified praise. The care, patience and assiduity of the authors in following the study of their little friends to the minutest details of their daily life and by night as well as by day, has

enabled them to issue a work of the liveliest interest and importance. It should stir many another to like industry. The habits of some twenty-two genera, often of several species under each, are studied, and even their individual idiosyncracies in many cases discovered and related. The illustrations add much to the value of the book, but the inspiring example of faithful work is its chief merit.

Mr. W. F. Kirby of the British Museum has just issued a little book, entitled Marvels of Ant Life (London, S. W. Partridge & Co). Although a compilation and so lacking the spirit of the work of an original observer, it is very well compiled, and in the short space of 174 pages covers sixteen chapters in the separate consideration of ants as architects, agriculturists, mushroom-growers, hunters, honey-pots, cattle-keepers, slaveholders, soldiers, etc., and culls from the abundant but widely scattered literature the best instances that can be given, and which are put together with skill. A general bibliography is appended, in which we miss Forel's extended paper on ants' nests, published in Zurich in 1893, and translated for the Smithsonian Report of 1894.

Chancellor W. J. Holland's Butterfly Book (New York, Doubleday and McClure Co.), is a "popular guide" to North American butterflies, and has its special value from illustrating in color some five hundred species with 750 figures. They are "three-color prints," and are astonishingly accurate reproductions from nature to the minutest detail, surpassing the best chromolithographs and only occasionally falling short, where the registry is imperfect or the original specimens are not altogether satisfactory; Nature, not a draughtsman, does the work for color as well as pattern. The work will add greatly to the interest of the butterfly collector, for it is published at the extraordinarily low price of three dollars, and figures most of our species north of Mexico. We are disappointed to find the life histories ignored.

STATE ENTOMOLOGIST OF NEW YORK.—The Country Gentleman states that the regents of the University of New York have appointed Ephraim Porter Felt, state entomologist, a previous appointment by the governor having proved to be without authority in law.
